

Abstract

An integrated chromatic dispersion compensator for optical signals in
5 optical communication networks, comprising a plurality of cascaded stages
of optical dispersion elements arranged in the form of a lattice filter
structure, is characterized by at least one tapping device disposed between
consecutive stages of the optical dispersion elements for tapping inter stage
signals, feeding each tapped inter stage signal into a separate feedback
10 loop, which in turn is feeding adaptation parameters into at least one of the
stages of the optical dispersion elements preceding the corresponding
tapping device of the inter stage signal. The invention presents a compact
dispersion compensator that can dynamically be adapted to varying
dispersion situations and that is capable of compensating the chromatic
15 dispersion of a multitude of data channels at the same time.

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